

### REMARKS

Applicant respectfully requests reconsideration of this application as amended. Claims 1-47 are pending in the application. Claims 1 and 26 have been amended. Claims 48-50 have been added. Claims 27-28 have been cancelled.

The Examiner rejected Claims 1, 5, 7, and 10 under 35 U.S.C. §102(e) as being anticipated by Jones IV et al. Applicants reserve the right to swear behind Jones.

Claim 1 as amended sets forth the following:

A method for use in allocating subcarriers in an OFDMA system  
comprising

allocating at least one diversity cluster of subcarriers to a first subscriber;

and

allocating at least one coherence cluster to a second subscriber, such that  
communication with the first and second subscribers is able to occur by  
simultaneously using the at least one diversity cluster and the at least one  
coherence cluster, respectively. (emphasis added)

As indicated above, Claim 1 sets forth allocating at least one diversity cluster of subcarriers to one subscriber and at least one coherence cluster to another subscriber so that different subscribers use at least one diversity cluster and at least one coherence cluster at the same time.

Jones describes the use of OFDM in a communication system. In Jones, the available bandwidth is divided into multiple subchannels that are octagonal in the frequency domain. Jones also describes that data is to be coherently combined across redundant subsets within each tone set. While Jones may disclose “coherent” and “diversity” clusters, Jones does not teach, mention, nor disclose coherent and diversity clusters being allocated simultaneously. Applicants

have amended the claims to more fully set forth this distinction. In view of this, Applicants respectfully submit that Claims 1, 5, 7, and 10 are not anticipated by Jones.

The Examiner rejected Claims 26-33 under 35 U.S.C. §102(e) as being anticipated by Baum et al. Applicants reserve the right to swear behind Baum.

Claim 26 as amended is set forth below:

An apparatus comprising:

a subscriber;

a base station including a subcarrier allocator and a variation detector, the

base station being communicatively coupled to the subscriber;

the variation detector to detect channel variation, wherein the subcarrier allocator

allocates either one or more diversity clusters of subcarriers or one or more

coherence clusters of subcarriers to the subscriber based on results of channel

variation detection by the variation detector. (emphasis added)

As emphasized above, Claim 26 sets forth detecting channel variation at the base station and using the results of detecting channel variation to allocate either one or more diversity clusters of subcarriers or one or more coherence clusters of subcarriers to a subscriber. Baum does not disclose this feature of Claim 26. Baum sets forth using channel information exclusively at the receiver for combining and detection purposes. Thus, Baum does not disclose performing channel measurements at the base station to make cluster assignments. In view of this, Applicants respectfully submits the present invention as claimed in Claim 26 is not anticipated by Baum.

The Examiner provisionally rejected Claims 1, 11, and 34 and their dependent claims under the judicially-created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 4-5, 11-12, 18-20, 24-25, and 29 of co-pending application number 09/837,337.

Applicants will defer response to the provisional double patenting rejection until such time as the rejection is no longer provisional.


Accordingly, Applicants respectfully submit that the rejections under 35 U.S.C. §102(e) have been overcome by the amendments and the remarks and withdrawal of these rejections is respectfully requested. Applicants submit that Claims 1-26 and 29-50 as amended are now in condition for allowance and such action is earnestly solicited.

Please charge any shortages and credit any overcharges to our Deposit Account No. 02-2666.

Respectfully submitted,

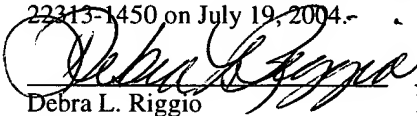
BLAKELY SOKOLOFF TAYLOR & ZAFMAN LLP

Dated: 7/14, 2004

  
\_\_\_\_\_  
Michael J. Mallie  
Attorney for Applicants  
Registration No. 36,591

12400 Wilshire Boulevard  
Seventh Floor  
Los Angeles, CA 90025-1026  
(408) 720-8300

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail with sufficient postage in an envelope addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on July 19, 2004.

  
\_\_\_\_\_  
Debra L. Riggio

7/19/2004  
Date